

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 5 (BRANCH AVENUE) AND MD 373 (ACCOKEEK ROAD) IN PRINCE GEORGE'S COUNTY, MARYLAND. MD 5 IS CONSIDERED TO RUN IN A NORTH/SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER SHALL BE REMOVED AND A NEW BASE MOUNTED CABINET AND CONTROLLER SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL CONTINUE TO OPERATE IN A FULL ACTUATED MODE USING 7 NEMA PHASES. VIDEO DETECTION SHALL BE INSTALLED. THE LEFT TURN PHASE ALONG NORTHBOUND MD 5 (BRANCH AVENUE) SHALL OPERATE WITH EXCLUSIVE LEFT TURN PHASING. THE LEFT TURN PHASES ALONG EASTBOUND AND WESTBOUND MD 373 (ACCOKEEK ROAD) SHALL OPERATE WITH EXCLUSIVE/PERMISSIVE LEFT TURN PHASING. THE CONTRACTOR SHALL CONTACT MR. EDWARD RODENHIZER, SIGNAL SHOP SUPERVISOR, 2 WEEKS IN ADVANCE OF ANY CHANGES THAT WILL BE NEEDED TO THE SIGNAL PHASING AS IT RELATES TO SPECIFIC WORK BEING PERFORMED DURING EACH PHASE OF CONSTRUCTION.

NOTES

- FOR FINAL PAVEMENT MARKINGS, REFER TO THE PAVEMENT MARKING PLANS, AS APPLICABLE; OTHER THAN THOSE DETAILED ON THE PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH ADMINISTRATION STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN THE APPROPRIATE 800 SERIES STANDARD PLATES. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- DISCONNECTING AND SPLICING OF INTERCONNECT CABLE SHALL BE PERFORMED BY THE CONTRACTOR. THE CONTRACTOR SHALL RUN THE INTERCONNECT CABLE INTO THE BASE OF EACH CABINET AND PROPERLY TAG THE CABLE. CONTACT MR. EDWARD RODENHIZER AT (410) 787-7652 SEVENTY-TWO HOURS IN ADVANCE OF INTENDED WORK.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- THE CONTRACTOR SHALL MAINTAIN THE CONTINUOUS OPERATION OF ALL INTERCONNECT, VEHICULAR, PEDESTRIAN DETECTORS, AND LIGHTING DEVICES. IF ANY DEVICE IS DAMAGED BY THE CONTRACTOR, IT SHALL BE REPAIRED WITHIN 72 HOURS BY THE CONTRACTOR AT NO COST TO THE ADMINISTRATION AFTER NOTIFICATION BY THE ENGINEER.
- THE PUSHBUTTON ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE STATE HIGHWAY ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	BASE MOUNTED (SIZE 6) CABINET AND CONTROLLER (MSHA SPECIFICATION) WITH VIDEO DETECTION INTERFACE EQUIPMENT FOR 1-4 CAMERAS	EA	1
973023	SHEET ALUMINUM SIGNS CONSISTING OF: R3-5(L) (30"x36") MAST ARM MOUNT R3-1 (30" x30") MAST ARM MOUNT D-3(2) (VAR. X16") MAST ARM MOUNT R10-3(1) (9"x15") POLE MOUNT SIGN TO READ "PUSHBUTTON TO CROSS BRANCH AVE"	SF EA EA EA EA	55.25 2 4 1 2

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

CAT CODE	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	2
585412	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	500
585414	24 INCH WHITE LEAD FREE REFLECTIVE THERMO. PAVEMENT MARKING	LF	150
800000	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT	LS	1
800000	2-WIRE CENTRAL CONTROL UNIT	EA	1
800000	AUDIBLE TACTILE PEDESTRIAN PUSH BUTTON STATION	EA	2
800000	16 IN. LED COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION PEDESTAL POLE MOUNT	EA	2
800000	PULL BACK AND REROUTE EXISTING INTERCONNECT CABLE	LF	110
800000	RELOCATE EXISTING VIDEO DETECTION CAMERA	EA	3
800000	RELOCATE EXISTING SIGN ON SIGNAL STRUCTURE	EA	5
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	10.5
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	450
805115	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	200
805118	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	340
805125	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	40
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	565
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	110
807202	METERED SERVICE PEDESTAL	EA	1
810601	NON-INVASIVE DETECTORS, 500 FOOT LEAD - IN CABLE	EA	4
810605	NON-INVASIVE DETECTORS, 1000 FOOT LEAD - IN CABLE	EA	3
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	13
813015	INSTALL OVERHEAD SIGN	SF	55.25
816005	CONTROL CABLE, 250 FOOT, VIDEO DETECTION	EA	2
816010	CONTROL CABLE, 500 FOOT, VIDEO DETECTION	EA	2
818004	10 FOOT BREAKAWAY PEDESTAL POLE	EA	2
818030	STEEL POLE WITH SINGLE 38 FT. MAST ARM	EA	1
818052	STEEL POLE WITH SINGLE 70 FT. MAST ARM	EA	1
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	1
832017	CABLE - 1 CONDUCTOR, NO 4 AWG, TYPE USE, 600V	LF	50
837001	GROUND ROD - 3/4 INCH DIAMETER X 10' LENGTH	EA	10
860265	RELOCATE EXISTING SIGNAL HEAD	EA	1
860284	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	30
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)	LF	285
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)	LF	965
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)	LF	1570
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	400
866104	20 FT. LIGHTING ARM ON SIGNAL STRUCTURE	EA	1
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1

NOTE:
THE CONTRACTOR SHALL DELIVER AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON STATION AND BASE UNIT TO THE SHA SIGNAL SHOP PRIOR TO LOCATION INSTALLATION FOR PROGRAMMING. SHA FORCES SHALL INSTALL AUDIBLE TACTILE PEDESTRIAN PUSH BUTTON BASE UNIT IN THE CABINET.

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER EQUIPMENT TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

NOTES (Continued)

- APS WILL FUNCTION AS FOLLOWS:
TO CROSS BRANCH AVENUE
A. WHEN PEDESTRIAN LOCATES AND PASSES PUSHBUTTON FOR AN EXTENDED TIME, THE MESSAGE WILL BE "WAIT TO CROSS BRANCH AT ACCOKEEK."
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.
- THE THE 10 FT. SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED AND APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

CONTACTS

OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.
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410-787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
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MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
410-787-7670

MS. DARLENE EIDE
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)
410-787-7668

DISTRICT

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ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
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PG - MR. BRIAN YOUNG
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PG - 301-513-7358

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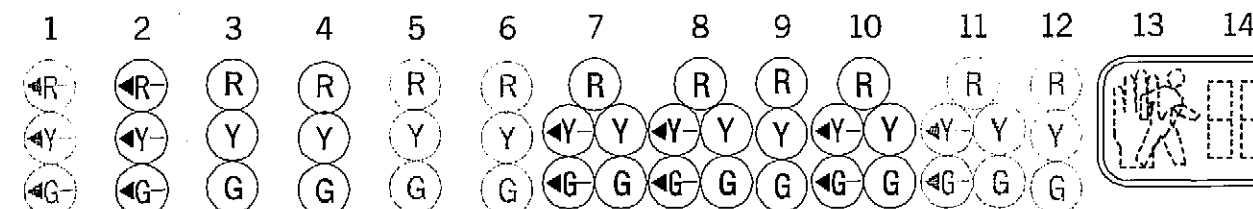
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POWER COMPANY

SOUTHERN MARYLAND ELECTRICAL COOPERATIVE
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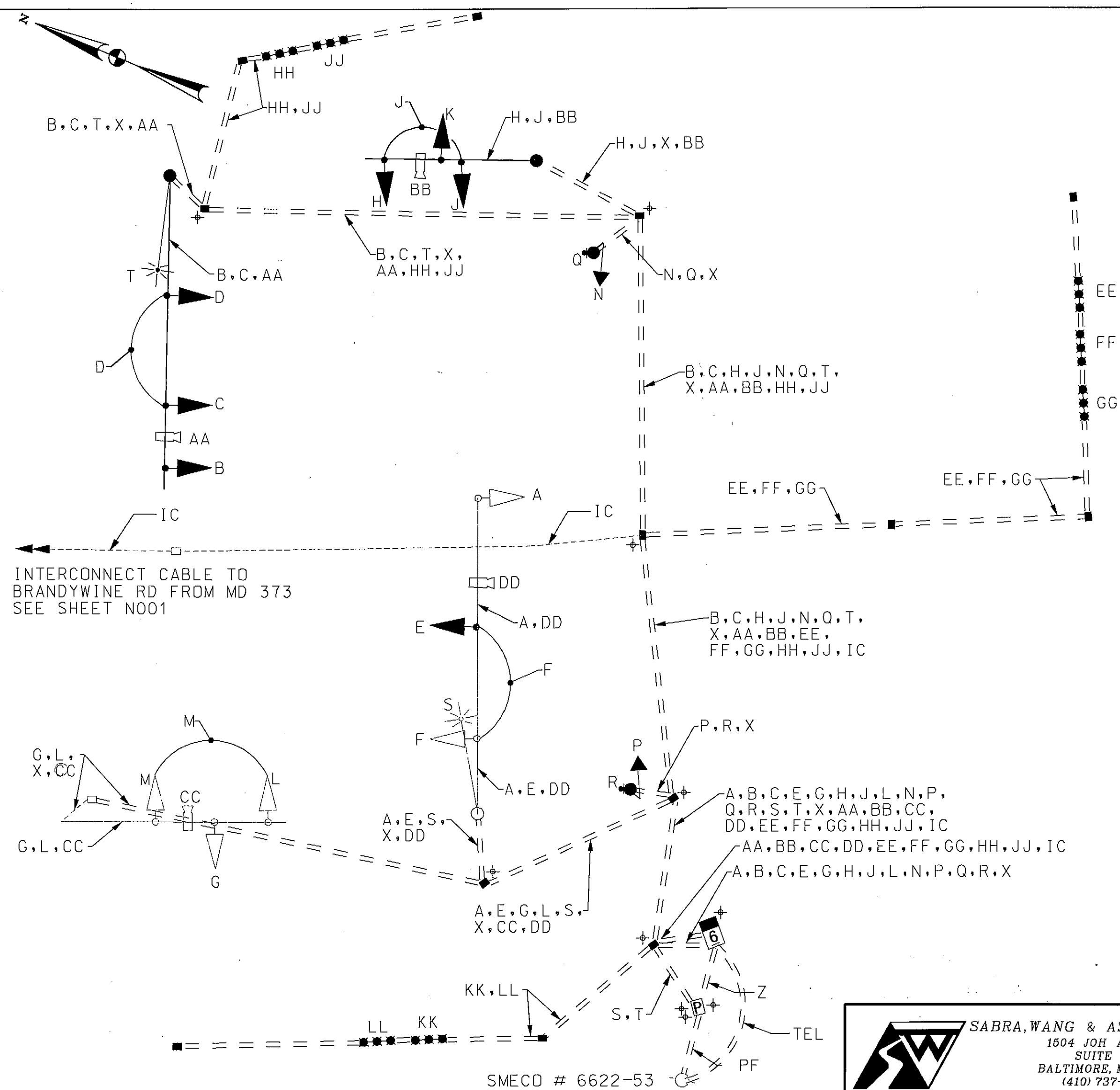
PHASE CHART



PHASE 1 AND 6	←G←	←G←	G	G	R	R	R	R	R	R	R	R	R	R	DW	DW
1 AND 6 CHANGE	←Y←	←Y←	G	G	R	R	R	R	R	R	R	R	R	R	DW	DW
PHASE 2 AND 6	←R←	←R←	G	G	G	G	R	R	R	R	R	R	R	R	DW	DW
2 AND 6 CHANGE	←R←	←R←	G	G	G	G	R	R	R	R	R	R	R	R	DW	DW
PHASE 3 AND 7	←R←	←R←	R	R	R	R	←GR	←GR	R	←GR	←GR	R	DW	DW		
3 & 7 CHANGE TO 3 AND 8, 4 AND 7, 4 AND 8, OR 4 AND 8 ALT.																
PHASE 3 AND 8	←R←	←R←	R	R	R	R	←GG	←GG	G	R	R	R	R	R	DW	DW
3 AND 8 CHANGE	←R←	←R←	R	R	R	R	←YG	←YG	Y	R	R	R	R	R	DW	DW
PHASE 4 AND 7	←R←	←R←	R	R	R	R	R	R	R	←GG	←GG	G	DW	DW		
4 AND 7 CHANGE	←R←	←R←	R	R	R	R	R	R	R	←YG	←YG	G	DW	DW		
PHASE 4 AND 8	←R←	←R←	R	R	R	R	G	G	G	G	G	G	G	G	DW	DW
4 AND 8 CHANGE	←R←	←R←	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	Y	DW	DW
PHASE 4 AND 8 ALT	←R←	←R←	R	R	R	R	G	G	G	G	G	G	G	G	W	W
PED CLEARANCE	←R←	←R←	R	R	R	R	G	G	G	G	G	G	G	G	FL/DW	FL/DW
4 AND 8 ALT CHANGE	←R←	←R←	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	Y	DW	DW
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

KEY

- C,E,G,H,K,L } 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- A,B,D,F,J,M,N,P } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- Q,R } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- AA,BB,CC,DD } VIDEO DETECTION CABLE
- EE,FF,GG,HH,JJ,KK,LL } NON-INVASIVE DETECTOR LEAD-IN CABLE
- S,T } 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
- X } 1 CONDUCTOR (NO. 6 AWG) BARE STRANDED COPPER GROUND WIRE
- PF } POWER FEED BY OTHERS (SMECO)
- Z } 3 WIRE 1 CONDUCTOR (NO. 4 AWG)
- IC } EXISTING INTERCONNECT CABLE
- TEL } TELEPHONE SERVICE (BY OTHERS)
- + } GROUND ROD



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 5 (BRANCH AVENUE)
AT MD 373 (ACCOKEEK ROAD)

TRAFFIC SIGNAL PLAN

SCALE NTS ADVERTISED DATE 02/17/2009 CONTRACT NO. PG1756270

DESIGNED BY V.NALLAMOTHU COUNTY PRINCE GEORGE'S

DRAWN BY V.NALLAMOTHU LOGMILE 16000503.06

CHECKED BY K.RINKER TMS NO. J437

F.A.P. NO. SEE TITLE SHEET TOD NO.

TS NO. 1030B DRAWING pSG OF N002 SHEET NO. 100 OF 110



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